

(No Model.)

C. KROMBERG.
BUCKLE.

No. 386,075.

Patented July 10, 1888.

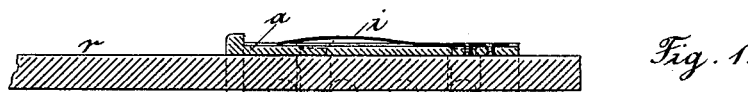


Fig. 1.

Fig. 2.

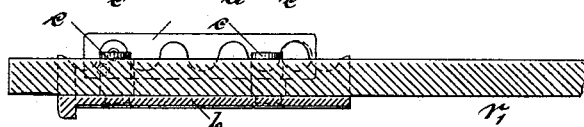


Fig. 3.

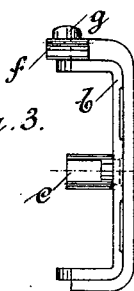


Fig. 4.

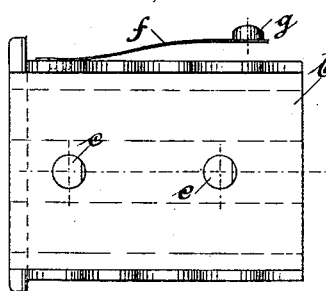


Fig. 5.

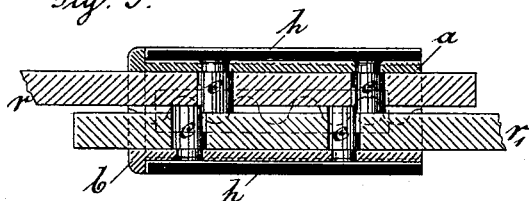


Fig. 6.

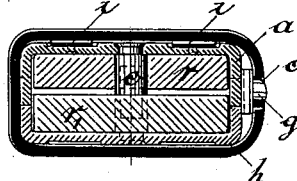


Fig. 7.

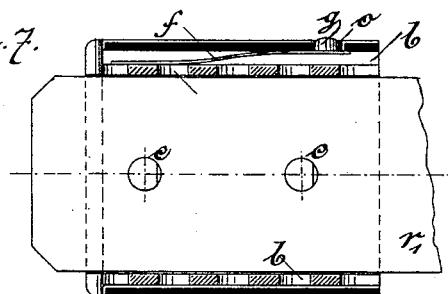
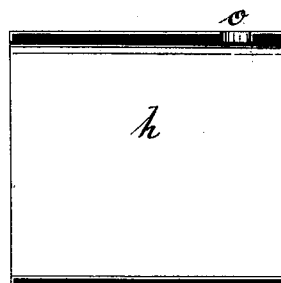


Fig. 8.



Witnesses
William Miller.
Edward Wolff.

Inventor.
Carl Kromberg.
by Van Santvoord & Hauff,
his attys.

UNITED STATES PATENT OFFICE.

CARL KROMBERG, OF WERDEN, PRUSSIA, GERMANY.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 386,075, dated July 10, 1888.

Application filed April 25, 1888. Serial No. 271,773. (No model.)

To all whom it may concern:

Be it known that I, CARL KROMBERG, a subject of the King of Prussia, residing at Werden, in the Kingdom of Prussia, Empire of Germany, have invented new and useful Improvements in Buckles for Fastening Trace-Straps, Machine-Straps, &c., of which the following is a specification.

The locking devices heretofore in use for traces have the disadvantage that when the horse has fallen the disengagement of the same for the purpose of unhitching the horse is frequently impossible or very difficult, because in most instances the traces—for example, in consequence of the horse lying thereon—are tightly drawn. To remove this disadvantage and to secure an easy and convenient mode of connecting and disconnecting the two parts of the trace, the device set forth in the accompanying drawings is employed. The same consists, in substance, of three parts—an outer movable case and two sections inclosed by the case, each section engaging an end of a trace on a flat side and at two edges, and each section being provided with one or more lugs passing through corresponding openings in the trace or strap. The two sections when placed upon one another engage one another by means of teeth formed at their edges, and they are held in such engagement by means of a case, thus connecting the ends of the traces or straps.

This invention is illustrated in the accompanying drawings, in which—

Figures 1 and 2 represent in longitudinal sections the two separate strap ends with the buckle-sections. Fig. 3 is an end view of a section. Fig. 4 is an inner view of a section. Fig. 5 is a longitudinal section of a closed buckle. Fig. 6 is a transverse section of a closed buckle. Fig. 7 is a horizontal section of Fig. 5. Fig. 8 is a longitudinal section of a case.

Similar letters indicate corresponding parts.

The strap ends *r* and *r'* are placed into the sections *a b*, so that the lugs *c* pass through corresponding holes in the strap ends. Upon placing the strap ends upon one another the toothed edges of the sections *a b* engage one another, and this engagement is secured by passing over the sections a case, *h*, Fig. 5. The lugs *c* of one section are out of line with the lugs of the other section, as seen in Fig. 5, so

that the lugs with their flattened ends projecting somewhat beyond the straps can be made to sit against one another when the sections are in engagement with one another. The lugs by thus bracing one another are not liable to bend in consequence of any strain or pull of the straps.

To enable the case to be easily slipped onto the sections, flat springs *i i* can be applied to one or both of the sections. These springs *i* can be somewhat sunk or placed in a recess in the sections. When the case is in place on the sections, said case is held in place by a spring, *f*, provided with a lug or projection, *g*, adapted to engage an opening, *o*, in the case, Figs. 6 and 7. If these strap ends are to be disconnected, the spring *f* is pressed so far inward that the projection *g* passes out of the opening in the case. The case can then be drawn off the sections, thus enabling the strap ends to be released, and during this process it is immaterial whether the strap is exposed to a pull, since thereby no action is exerted on the case. The buckle can also be used for connecting driving-belts. The belt ends in this case are not placed upon one another, but abut against one another. The toothed sides of the two sections in this case are made correspondingly lower. In the case of wide belts several lugs *c*, made to pass through the belts, can be secured in a row in the sections.

When the buckle is used to secure driving-belts, the locking-spring *f* is advantageously placed upon the broad face of the upper section, *a*.

What I claim as new, and desire to secure by Letters Patent, is—

The lock or buckle for straps, traces, and other articles herein described, consisting of two sections, *a b*, adapted to engage the article to be secured and to engage with one another at their edges, said sections being provided with lugs *c*, and a case adapted to surround said sections and to be secured thereon by a spring, *f*, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

CARL KROMBERG. [L. S.]

Witnesses:

O. HENOCK,
B. ROE.